

REMARKS

Claims 1-32 were examined and reported in the Office Action. Claims 1-8, 15-23 and 30-31 are rejected. Claims 9-14, 24-29 and 32 are objected to. Claims 1, 7-14, 24, 27 and 32 have been amended. Claim 6 is cancelled. Claims 1-5 and 7-32 remain.

The specification has been amended as follows:

In paragraphs [0069], [0072], [0075] – [0077], and [0087] of the specification, "reference signal 41S" has been amended to read --reference signal 42S--, and "reference signal generating circuit 41" has been amended to read --reference signal generating circuit 42--.

Applicant requests reconsideration of the application in view of the foregoing amendments and following remarks.

Claims 1-32 are objected to under 37 CFR 1.75(c). The claims have been amended responsive to the objections.

Claims 9 through 14, 24, 27 and 32 have been amended in independent form. In the Action, the Examiner indicated that such amendment would place Claims 9-14, 24-29 and 32 into condition for allowance.

Claims 1-6, 15-22 and 30 are rejected under 35 USC 103(a) as being unpatentable over Sone (US Patent 4,771,268) in view of Johansen (US Patent 7,184,581). Claims 7-8 are rejected under 35 USC 103(a) as being unpatentable over Sone in view of Johansen and Fouche (US Patent 5,311,550). Claims 23 and 31 are rejected under 35 USC 103(a) as being unpatentable over Sone, in view of Johansen and Koyama (US Patent 5,990,804).

In response, Claim 1 has been amended to clarify its differences over the prior art of record. Claims 7 and 8 have been amended by incorporating the feature of the existing claim 6. Claim 6 has been cancelled.

As one of its features, the present invention includes a waveform information detection unit in which the waveform input is aptly corrected for processing as set forth in amended Claim 1. According to the present invention, as shown in Fig. 7 through 10, the response signal (38) is corrected for comparison, namely has its level shifted through the level shift circuit (41) so as to have a center potential substantially equal to that of a reference signal (42S) and the thus corrected response signal (41S) is compared with the reference signal (42S) from the reference signal generating circuit (42). This correction relieves the constraint on the center voltage of the reference signal (42S) side. Specifically, the reference signal (42S) need not necessarily be set to a center potential substantially equal to a common voltage applied to the object (10), but may be a signal having a voltage that alternately varies between a positive or negative supply potential and the ground potential reference signal. Further, according to the present invention, use

of only a single positive or negative power supply is permitted to drive an oscillator for generating the reference signal (42S).

Thus, by the use of only a single either positive or negative power supply to cover the entire biometric recognition apparatus, the present invention can reduce not only the layout area of the circuit but also the manufacturing cost of the biometric recognition apparatus.

In contrast, the "waveform information detection unit (21)" of Sone (US 4,771,268) does not teach the above-described features of the present invention at all, nor do any of the secondary references Johansen, Fouche or Koyama. In light of the foregoing, Applicant submits that the present invention would not have been obvious from Sone in combination with Johnson.

The remaining claims depend directly or indirectly from amended Claim 1 or have already been deemed allowable over the prior art.

In view of the foregoing, it is submitted that Claims 1-5 and 7-32 patentably define the subject invention over the cited reference of record, and are in condition for allowance and such action is earnestly solicited at the earliest possible date. If the Examiner believes a telephone conference would be useful in moving the case forward, he is encouraged to contact the undersigned at (310) 207-3800.

If necessary, the Commissioner is hereby authorized in this, concurrent and future replies, to charge payment or credit any overpayment to Deposit Account No. 02-2666 for any additional fees required under 37 C.F.R. §§1.16 or 1.17, particularly, extension of time fees.

PETITION FOR EXTENSION OF TIME

Per 37 C.F.R. 1.136(a) and in connection with the Office Action mailed on April 29, 2008, Applicant respectfully petitions Commissioner for a one (1) month extension of time, extending the period for response to August 29, 2008. Attached is a check in the amount of \$120 to cover the petition filing fee for a 37 C.F.R. 1.17(a)(1) large entity.

Respectfully submitted,

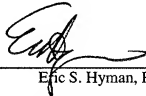
BLAKELY, SOKOLOFF, TAYLOR, & ZAFMAN LLP

Dated:

8/29/08

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CERTIFICATE OF ELECTRONIC FILING

I hereby certify that this correspondence is being submitted electronically via EFS Web on the date shown below


Linda Metz

8-29-08
8/29/2008